

[4910-13-P]

## DEPARTMENT OF TRANSPORTATION

**Federal Aviation Administration** 

**14 CFR Part 39** 

[Docket No. FAA-2020-0572; Product Identifier 2017-SW-056-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to supersede Airworthiness Directive (AD) 2007-26-51, which applies to certain Airbus Helicopters Deutschland GmbH Model EC135 helicopters. AD 2007-26-51 requires an inspection of the tail rotor control rod (control rod) and ball pivot and, depending on findings, replacing these parts. Since the FAA issued AD 2007-26-51, the manufacturer developed a new control rod, which the FAA has determined must be installed in order to address the identified unsafe condition. This proposed AD would require an inspection of certain ball pivots, application of corrosion preventative compound on the ball pivot, and corrective action, as applicable. This proposed AD would also require replacement of the control rod with the newly developed control rod. The FAA is proposing this AD to address the unsafe condition on these products.

**DATES:** The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.
  - Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this NPRM, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at https://www.airbus.com/helicopters/services/technical-support.html. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0572; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, any comments received, and other

information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5116; email David.Hatfield@faa.gov.

#### SUPPLEMENTARY INFORMATION:

# **Comments Invited**

The FAA invites you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include "Docket No. FAA-2020-0572; Product Identifier 2017-SW-056-AD" at the beginning of your comments. The FAA specifically invites comments on the overall regulatory, economic, environmental, and energy aspects of this NPRM. The FAA will consider all comments received by the closing date and may amend this NPRM because of those comments.

The FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about this NPRM.

## **Discussion**

The FAA issued AD 2007-26-51, Amendment 39-15357 (73 FR 6008, February 1, 2008) ("AD 2007-26-51"), for certain Airbus Helicopters Deutschland

GmbH (type certificate previously held by Eurocopter Deutschland GmbH) Model EC 135 helicopters. AD 2007-26-51 requires an inspection of the control rod and ball pivot for discrepancies and depending on findings, replacing these parts. AD 2007-26-51 resulted from a report of an accident involving the failure of a control rod. The FAA issued AD 2007-26-51 to address failure of a control rod and subsequent loss of control of the helicopter.

### Actions Since AD 2007-26-51 Was Issued

Since the FAA issued AD 2007-26-51, Airbus Helicopters Deutschland GmbH developed a new control rod. The FAA determined this new control rod must be installed in order to address the identified unsafe condition.

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2010-0227R1, dated April 7, 2017 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Model EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC 135 T2, and EC135 T2+ helicopters; and Model EC635 T1, EC635 P2+, and EC635 T2+ helicopters.

EASA advises that in 2007, an accident occurred with an EC135 helicopter in Japan. Preliminary investigation results indicated that loss of control was due to failure of the control rod. EASA issued EASA Emergency AD 2007-0301-E to inspect the affected control rod, part number (P/N) L672M2005207, and the ball pivot (which correspond to the actions required by AD 2007-26-51). EASA AD 2007-0301-E was subsequently superseded by EASA AD 2007-0313, to require repetitive inspections and, depending on

findings, the replacement of the control rod and ball pivot, only for helicopters not equipped with an automatic flight control system (AFCS). After review of the inspection results, EASA issued EASA AD 2008-0064 (later revised) to apply the requirements to helicopters equipped with an AFCS.

EASA also advises that after EASA AD 2008-0064R1 was issued, Eurocopter Deutschland GmbH developed a new control rod P/N L672M2006101, installation of which constituted terminating action for the repetitive inspections. Consequently, EASA issued EASA AD 2010-0227, retaining the requirements of EASA AD 2008-0064R1, and requiring the replacement of control rod P/N L672M2005207 with the new control rod P/N L672M2006101.

In addition, EASA advises that following a review of data and feedback received from in-service helicopters, it has been determined that the repetitive inspections of the ball pivot are no longer required to address the unsafe condition. The repetitive inspections of the ball pivot are now included in Chapter 05 of the aircraft maintenance manual. Therefore, EASA issued EASA AD 2010-0227R1 to remove the requirement for repetitive inspections of the control rod and of the ball pivot.

You may examine the MCAI in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0572.

## **Related Service Information Under 1 CFR part 51**

Airbus Helicopters has issued Alert Service Bulletin ASB EC135- 67A- 017, Revision 4, dated April 3, 2017, including the Appendix (watermarked as Appendix to SB EC135- 67A- 017 Revision 4). This service information describes procedures for,

among other actions, an inspection of ball pivots, P/Ns 92-201-00 and 92-207-00, for freedom of movement, and for damage (e.g., cracks, missing hardware, loose bearing, or play), application of corrosion preventative compound, and corrective actions. Corrective actions include replacing the ball pivot and the control rod with serviceable parts, and applying corrosion preventative compound.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

#### **Other Related Service Information**

Eurocopter has issued Service Bulletin EC135-67-018, Revision 01, dated May 15, 2008, which describes procedures for replacing the control rod having P/N L672M2005207 with a control rod having P/N L672M2006101.

Eurocopter has also issued Alert Service Bulletin EC135-67A-017, Revision 03, dated July 26, 2010, which describes procedures for ball pivot inspections and replacements.

#### **FAA's Determination**

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in the MCAI and service information referenced above. The FAA is proposing this AD after evaluating all the relevant information and determining the unsafe condition described previously is likely to exist or develop on other products of the same type design.

### **Proposed Requirements of this NPRM**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under "Differences Between this Proposed AD and the MCAI or Service Information."

### Differences Between this Proposed AD and the MCAI or Service Information

The MCAI includes a compliance time of 50 flight hours for the inspection of a certain ball pivot; 100 flight hours or 43 days for the inspection of a certain other ball pivot; and 400 flight hours or 12 months for the replacement of the control rod. This proposed AD would require all actions to be accomplished within a compliance time of 50 hours time-in-service.

The MCAI applies to Airbus Helicopters Deutschland GmbH Model EC635 T1, EC635 P2+, and EC635 T2+ helicopters. Model EC635 T1, EC635 P2+, and EC635 T2+ helicopters are not certified by the FAA and are not included on the U.S. type certificate data sheet except where the U.S. type certificate data sheet except where the U.S. type certificate data sheet explains that the Model EC635T2+ helicopter having serial number 0858 was converted from Model EC635T2+

to Model EC135T2+; this proposed AD therefore does not include those Model EC 635 helicopters in the applicability.

Additionally, although the MCAI and service information specify to contact the manufacturer, this proposed AD does not include that requirement.

## **Costs of Compliance**

The FAA estimates that this proposed AD affects 311 helicopters of U.S. registry.

The FAA estimates the following costs to comply with this proposed AD:

### **Estimated costs for required actions**

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
4 work-hours X \$85 per hour = \$340	\$800	\$1,140	\$354,540

#### **Estimated costs of on-condition actions**

Labor cost	Parts cost	Cost per product
Up to 6 work-hours X \$85 per hour = Up to \$510	Up to \$2,150	Up to \$2,660

## **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

The FAA has determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

#### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

## § 39.13 [Amended]

2. The FAA amends § 39.13 by removing Airworthiness Directive (AD) 2007-26-51, Amendment 39-15357 (73 FR 6008, February 1, 2008), and adding the following new airworthiness directive (AD):

**Airbus Helicopters Deutschland GmbH:** Docket No. FAA-2020-0572; Product Identifier 2017-SW-056-AD.

#### (a) Comments Due Date

The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

## (b) Affected ADs

This AD replaces AD 2007-26-51, Amendment 39-15357 (73 FR 6008, February 1, 2008) ("AD 2007-26-51").

## (c) Applicability

This AD applies to Airbus Helicopters Deutschland GmbH Model EC135P1, EC135T1, EC135P2, EC135T2, EC135P2+, EC135T2+, EC135P3, and EC135T3 helicopters, certificated in any category, all serial numbers.

## (d) Subject

Joint Aircraft Service Component (JASC) Code 6700, Rotorcraft Flight Control.

## (e) Reason

This AD was prompted by an accident involving the failure of a tail rotor control rod. The FAA is issuing this AD to address failure of a tail rotor control rod and subsequent loss of control of the helicopter.

# (f) Compliance

Comply with this AD within the compliance times specified, unless already done.

## (g) Definitions

- (1) Group 1: Helicopters that, on the effective date of this AD, have a tail rotor control rod installed having part number (P/N) L672M2005207.
- (2) Group 2: Helicopters that, on the effective date of this AD, do not have a tail rotor control rod installed having P/N L672M2005207.

#### (h) Ball Pivot Inspection

Within 50 hours time-in-service after the effective date of this AD: Inspect the ball pivot, P/N 92-201-00 and P/N 92-207-00, for damage and freedom of movement, in accordance with step 3.C.(3) or step 3.D.(3), as applicable, of the Accomplishment Instructions of the Appendix (watermarked as Appendix to SB EC135- 67A- 017 Revision 4) to Airbus Helicopters Alert Service Bulletin ASB EC135- 67A- 017, Revision 4, dated April 3, 2017. For purposes of this inspection, damage to the ball pivot may be indicated by cracks, missing hardware, loose bearings, or play.

#### (i) Corrective Action

If, during the inspection required by paragraph (h) of this AD, there is any damage on any ball pivot or the ball pivot cannot be moved: Before further flight, replace the ball pivot in accordance with step 3.C.(3) or step 3.D.(3), as applicable, of the

Accomplishment Instructions of the Appendix (watermarked as Appendix to SB EC135-67A-017 Revision 4) to Airbus Helicopters Alert Service Bulletin ASB EC135-67A-017, Revision 4, dated April 3, 2017, and the tail rotor control rod as required by paragraph (j) of this AD.

## (j) Tail Rotor Control Rod Replacement:

Group 1: Unless already done as required by paragraph (i) of this AD, within 50 hours time-in-service after the effective date of this AD, replace the tail rotor control rod having P/N L672M2005207 with a tail rotor control rod having P/N L672M2006101.

Note 1 to paragraph (j): Guidance for replacing the tail rotor control rod can be found in Eurocopter Service Bulletin EC135-67-018, Revision 01, dated May 15, 2008.

#### (k) Parts Installation Prohibition

- (1) Group 1: After modification of a helicopter as required by paragraph (i) or (j) of this AD, no person may install on any helicopter a tail rotor control rod having P/N L672M2005207.
- (2) Group 2: As of the effective date of this AD, no person may install on any helicopter a tail rotor control rod having P/N L672M2005207.

### (1) Credit for Previous Actions

This paragraph provides credit for the inspection and ball pivot replacements required by paragraphs (h) and (i) of this AD, if those actions were performed before the effective date of this AD using Eurocopter Alert Service Bulletin EC135-67A-017, Revision 03, dated July 26, 2010.

#### (m) Special Flight Permit

Special flight permits, as described in 14 CFR 21.197 and 21.199, are not allowed.

# (n) No Reporting Requirement

Although the Appendix (watermarked as Appendix to SB EC135- 67A- 017 Revision 4) to Airbus Helicopters Alert Service Bulletin ASB EC135- 67A- 017, Revision 4, dated April 3, 2017, specifies to contact the manufacturer, this AD does not include that requirement.

### (o) Alternative Methods of Compliance (AMOCs)

- (1) The Manager, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: David Hatfield, Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5116; email 9-ASW-FTW-AMOC-Requests@faa.gov.
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, notify your principal inspector or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

### (p) Related Information

(1) The subject of this AD is addressed in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD 2010-0227R1, dated April 7, 2017. This EASA AD may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2020-0572.

(2) For service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at

https://www.airbus.com/helicopters/services/technical-support.html. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

Issued on June 12, 2020.

Lance T. Gant, Director, Compliance & Airworthiness Division, Aircraft Certification Service.

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